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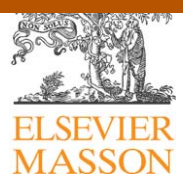

IMAGE

Unusual monocoronary system and sudden death

Coronaire unique et mort subite

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A 70-year-old woman was referred to our centre for typical chest pain. Physical examination was normal except for a midsystolic murmur. Echocardiography showed a moderate aortic stenosis (mean transvalvular gradient 23 mmHg) with normal left ventricular function. Invasive coronary angiography revealed a single coronary — trifurcation of a monocoronary system — free of obstruction (Fig. 1). A multidetector computed tomography scan (Fig. 2) confirmed the diagnosis and specified the anomalous origin of the right coronary artery from the left main artery and its course between the ascending aorta and the main pulmonary artery. Persantin scintigraphy was planned to show ischaemia; unfortunately, the patient died a few days before the test. Usually, this rare coronary anomaly (0.024% of the population) is associated with sudden death and ischaemia during exercise in young subjects, hypothetically by external compression between the aorta and the pulmonary artery.

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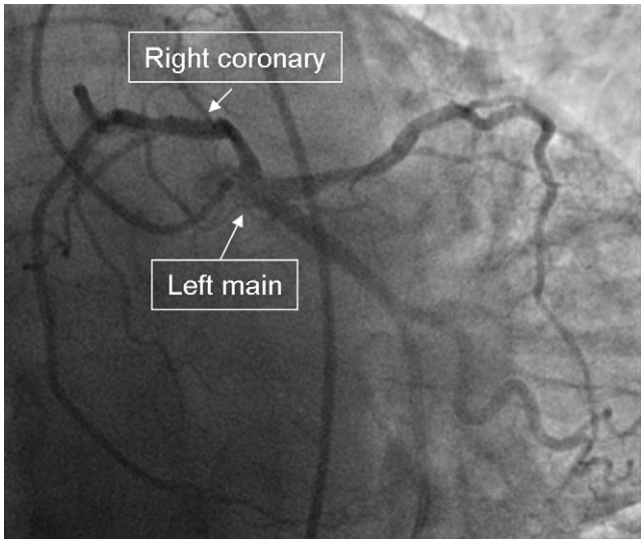

Figure 1. Invasive coronary angiography shows a single coronary — trifurcation of a monocoronary system — free of obstruction.

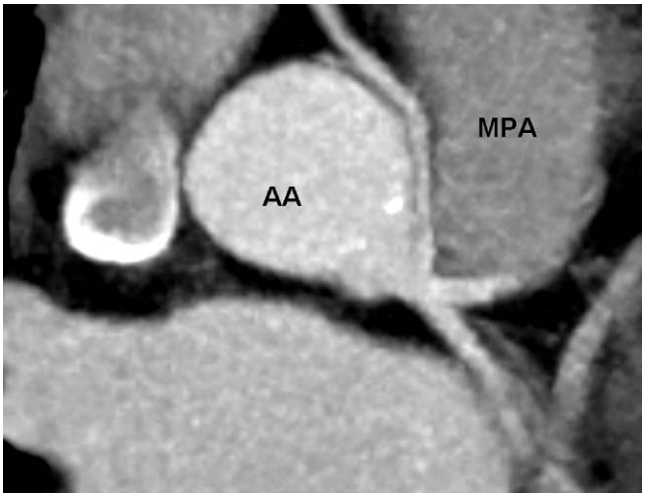

Figure 2. Multidetector computed tomography shows the anomalous origin of the right coronary artery from the left main artery and its course between the ascending aorta (AA) and the main pulmonary artery (MPA).

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.